

REMARKS

INTRODUCTION

In accordance with the foregoing, claim 1 has been amended. Claims 5, 8, 9 and 15-18 have been cancelled. Claims 1-4, 6, 7, 10-14 and 19-21 are pending and under consideration.

CLAIM REJECTIONS

Claims 1 and 14 were rejected under 35 USC 102(b) as being anticipated by Harbers (US 2,728,204) (hereinafter "Harbers").

Claims 2 and 12 were rejected under 35 USC 103(a) as being unpatentable over Harbers.

Claims 3, 5, 7 and 11 were rejected under 35 USC 103(a) as being unpatentable over Harbers in view of Lakdawala et al. (US 6,435,265) (hereinafter "Lakdawala").

Claim 4 was rejected under 35 USC 103(a) as being unpatentable over Harbers in view of Lakdawala and further in view of Tanaka et al. (US 4,715,437) (hereinafter "Tanaka").

Claim 6 was rejected under 35 USC 103(a) as being unpatentable over Harbers in view of Jaspers II et al. (US 5,552,581) (hereinafter "Jaspers").

Claims 8, 10, 13 and 18-20 were rejected under 35 USC 103(a) as being unpatentable over Ho (US 5,499,514) (hereinafter "Ho") in view of Harbers.

Claim 9 was rejected under 35 USC 103(a) as being unpatentable over Ho in view of Harbers and further in view of Tanaka.

Claims 15-17 were rejected under 35 USC 103(a) as being unpatentable over Henderson (US 2,667,041) (hereinafter "Henderson") in view of Brun et al. (US 6,668,566) (hereinafter "Brun").

Claim 21 was rejected under 35 USC 103(a) as being unpatentable over Harbers and Ho and further in view of Maudlin (US 3,750,418) (hereinafter "Maudlin").

Claims 1-7, 11, 12, 14 and 19-21

Amended claim 1 recites: "...the evaporator is installed on a wall, and the at least one heat exchange fin is inclined toward one side relative to the vertical direction and the bottom end of the at least one heat exchange fin is adjacent to the wall on which the evaporator is installed."

Support for this amendment may be found in at least original claim 5. The Office Action relies on Lakdawala to show this feature of claim 1, and specifically, the Office Action relies on Figures 1 and 2 of Lakdawala. However, in contrast to claim 1, which recites an evaporator mounted against a wall, Lakdawala discusses a gravity cooling unit having at least one pair of cooling columns with each column having a plurality of cooling fins mounted on one more serpentine cooling coils carrying a refrigerant, further, the unit has mounting means for use in mounting the unit against a ceiling. See Lakdawala, Abstract. Further, claim 1 recites that the heat exchange fin is adjacent to the wall on which the evaporator is installed. This technical feature of claim 1 provides that because the bottom end of the heat exchange fin is in contact with the wall of the evaporator accommodating part, the water drops formed on the heat exchange fin flow along toward the wall of the evaporator accommodating part easily.

In contrast to claim 1, Lakdawala discusses that as the fins 5 cool, they cool the warm air between the fins so that the cooled air, being denser, drops from the fins, along their long inner sides 27, into the diverging air space 49. As the cooled air leaves the fins 5 and the air space 49, more warm air is induced to flow up the outer, long sides 45 of the fins 5, which outer long sides face the ceiling past the baffle 43 and into the fins as shown by the arrows "B" in Figure 2 of Lakdawala to replace the cooled air and to be cooled in turn. Any condensate that forms on the surfaces of the fins 5 runs straight down. A portion of this condensate will reach the inner long side 27 of the fins 5 and then run along this side 27 until it reaches the lower corner 51 of the fin 5, dropping off into the junction 53. See Lakdawala, 4:48-4:4:60 and Figure 2. In contrast to Lakdawala, claim 1 recites that the heat exchange fin is adjacent to the wall on which the evaporator is installed rather than positioned so that the condensate runs to a lower corner of the fin to drop off into a junction 53. More specifically, a reason that a bottom end of a heat exchange fin is located adjacent to an inner side of the main body is to guide flowing of a defrosted water, and the cited disclosures all require an apparatus for collecting the defrosted water whereas the present invention can use the inner wall.

Claims 2-7, 11, 12, 14 and 19-21 depend on claim 1 and are therefore believed to be allowable for at least the foregoing reasons.

Withdrawal of the foregoing rejections is requested.

Claims 8 and 9

Claims 8 and 9 have been cancelled.

Claims 10 and 13

Claim 10 recites: "...wherein the heat exchange fin is inclined toward one side relative to the vertical direction and the bottom end of the heat exchange fin is adjacent to the wall." In the Office Action, the Examiner notes that the primary reference Ho does not discuss the details of the heat exchange fin. Instead, the Examiner relies on Harbers to cure this deficiency in Ho. However, it is respectfully submitted that in contrast to claim 10, Harbers only discusses cooling coils 10 mounted beneath a ceiling that include fins 12 mounted to the central pipe members 11. The diamond-shaped fins 12 are not mounted adjacent to a wall and further are designed to drain condensate from the bottom point of the fin into a gutter 14 rather than against a wall. See Harbers, 2:27-2:52 and Figure 2. As the technical feature of claim 10 where the heat exchange fin is adjacent to the wall is not discussed in either Ho or Harbers, it is respectfully submitted that claim 10 patentably distinguishes over the relied upon prior art.

Claim 13 depends on claim 10 and is therefore believed to be allowable for at least the foregoing reasons.

Withdrawal of the foregoing rejections is requested.

Claims 15-18

Claims 15-18 have been cancelled.

CONCLUSION

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: August 9, 2007

By: / Gregory W. Harper /
Gregory W. Harper
Registration No. 55,248

1201 New York Avenue, NW, 7th Floor
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501